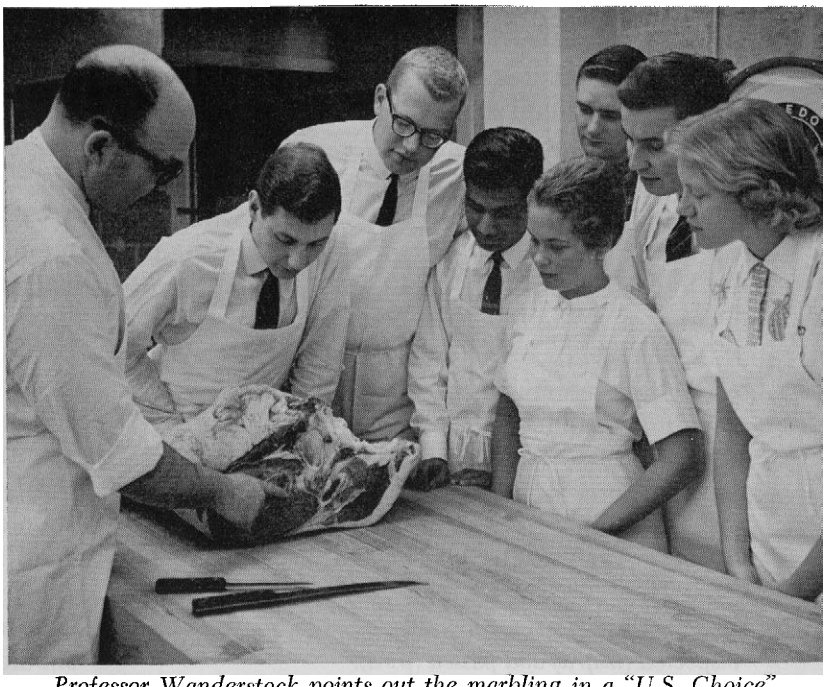
Meat Purchasing

Meat is the basic item on the menu. How to select and purchase meats is essential to successful food operation.



Professor Wanderstock points out the marbling in a "U.S. Choice" round of beef to a group of students in his meats laboratory in Statler Hall.

by Jeremiah J. Wanderstock, Ph.D.[1]

The importance of meat on the menu in hotels, restaurants, and clubs cannot be over emphasized. As meat is the usual entrée, guests are more critical of it than of any other menu item. Knowledge of meats can "make" (and lack of it "break") a food service operation. The most successful foods people are thoroughly versed in all phases of meats and especially in its selection.

Every effort should be expended to provide the best possible merchandise for the guest's enjoyment and pleasure. In order to accomplish this objective, one must be familiar with a number of considerations relating to meats.

Inspection

A purchaser of meats who serves the public must be certain that he buys and serves only that meat which has been inspected for soundness.

Inspection Agencies

In the United States, fortunately, the Meat Inspection Division, Agricultural Marketing Service, United States Department of Agriculture has developed an intensive program of meat and meat-product inspection.

This inspection service guarantees that these food items were wholesome and were handled in a sanitary manner 1) at the time of slaughter; 2) during the various stages of the meat product preparation, and 3) when the products containing meat were labeled and, in some instances, sealed into containers. This guarantee is an ever-important consideration, especially for food service operations catering to the public.

Most states maintain some form of state meat inspection, patterned after the Federal system. Some counties in a few states, and many municipalities throughout the United States maintain their own meat inspection services.

[1] Professor Wanderstock has been a member of the Cornell faculty for fifteen years. He has worked for the Meat Merchandising Department of the National Live-Stock and Meat Board in Chicago, and has been consultant for several hotel, restaurant, and club operations.

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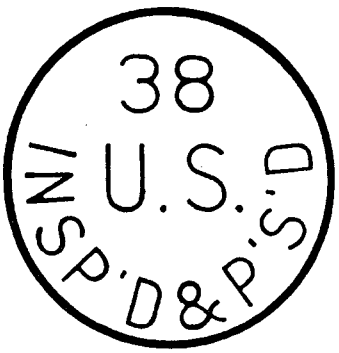
Inspection Stamps

A product inspected and passed as fulfilling the requirements of Federal Meat Inspection carries with it the stamp shown in Diagram 1. The number on the stamp refers to the plant in which the meat or meat product was inspected and passed. Each plant in the United States carries a specific number for identification purposes.

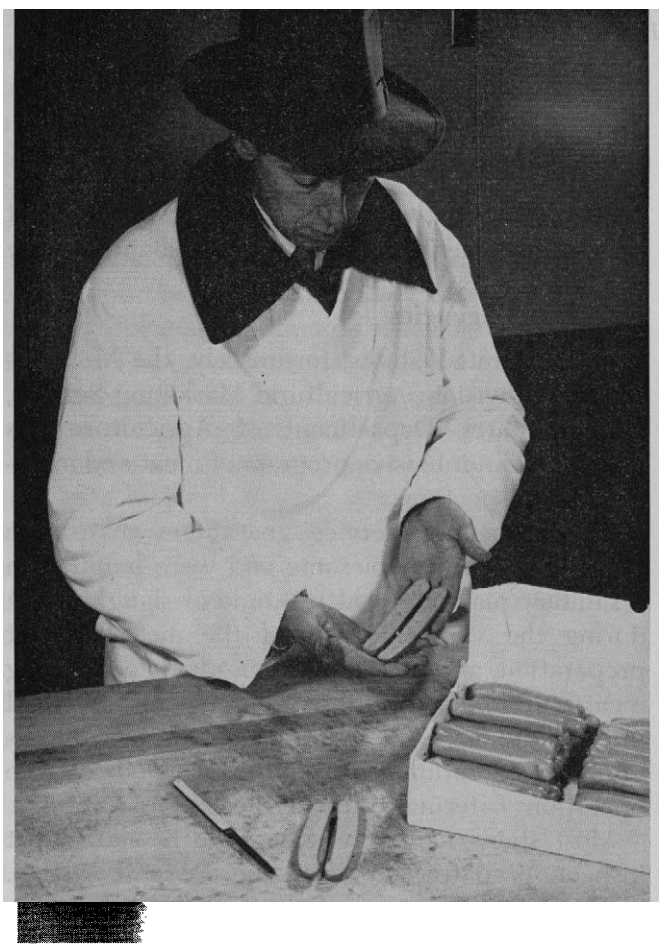


Facsimile of the stamp of the Meat Inspection Service of the U.S. Department of Agriculture. The number "38" refers to the slaughter plant at which the meat is inspected (insp'd) and passed (p's'd).

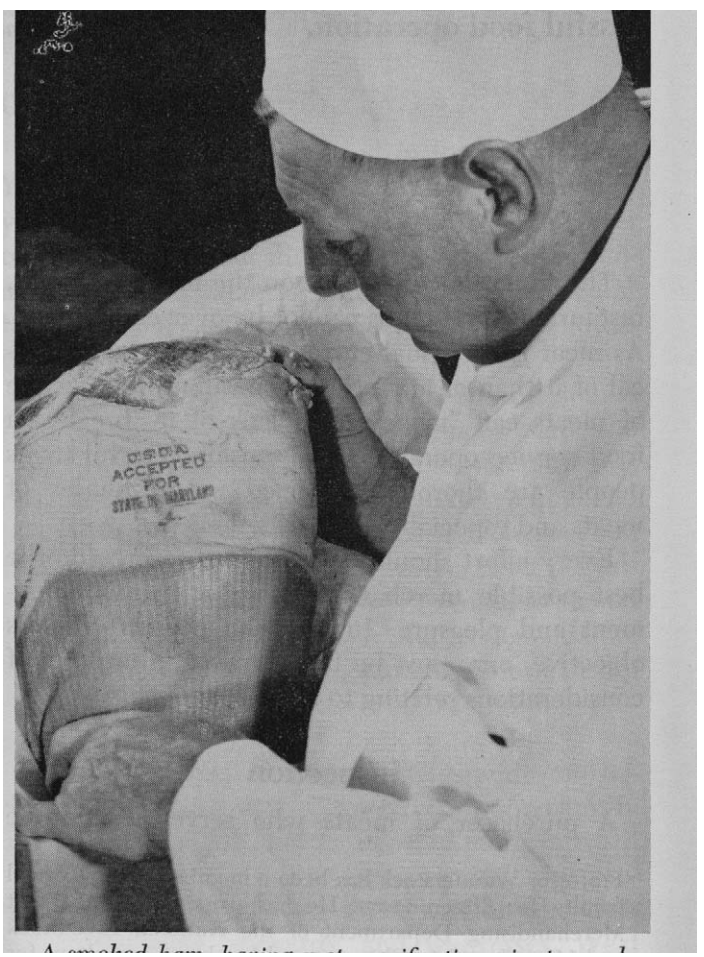
Inspection on Delivery

The presence of the stamp on the carcass or a replica of the stamp on a meat food product does not guarantee that the product is wholesome when it is received at the hotel or restaurant. Much can happen from the time the animal is killed and inspected until the meat is so received. In the majority of instances, nothing happens to cause the meat to become unwholesome. Occasionally, meat is received that is slimy and sticky and has an undesirable odor. This usually indicates that bacteria or other spoilage agents have started to produce an effect which makes for an unpalatable product. On arrival, meat should be very carefully checked to insure that it is not spoiling.

The effort of every hotel and restaurant operator should be to present meat at its highest possible level of desirability. Anything that deters from this should be avoided; hence, meat that is starting to spoil should be refused on delivery. If any question arises as to the safety of preparing and serving a meat item, the local Department of Health should be contacted. Or, call in a veterinarian.



Frankfurters are examined for compliance with specifications.



A smoked ham, having met specifications, is stamped as "USDA Accepted."

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Inspected meats, at the Federal, State, or local level, therefore, are basic in meat selection.

Grading

Once meat satisfies the requirements of wholesomeness, then the next consideration should be its "eating desirability," which is commonly referred to as "quality" or "grade." The best indication of this eating quality is furnished by the grade indicated for the carcass or cut.

At present, two types of meat grading are practiced in the United States: United States (Federal) grading and Packer grading (commonly referred to as "packer brand" names).

Federal grading is a function of the Meat Grading Division, Agricultural Marketing Service, U.S. Department of Agriculture, Washington 25, D.C. This division publishes the *Service and Regulatory Announcements* for grades of various meats.

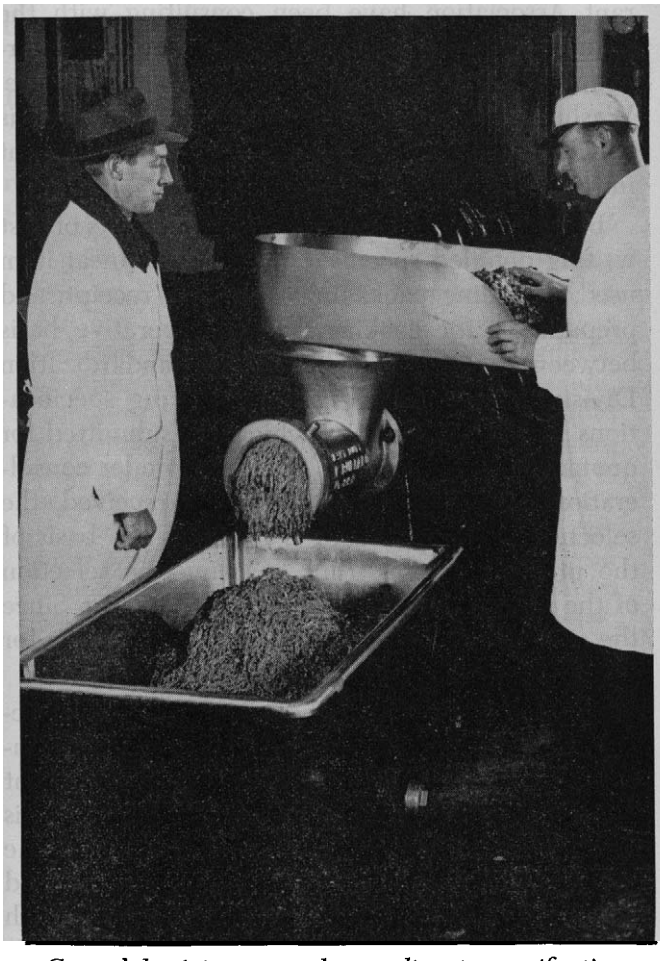
Basis for Meat Grading

The basis of meat grading is a consideration of the *conformation, finish,* and *quality.*

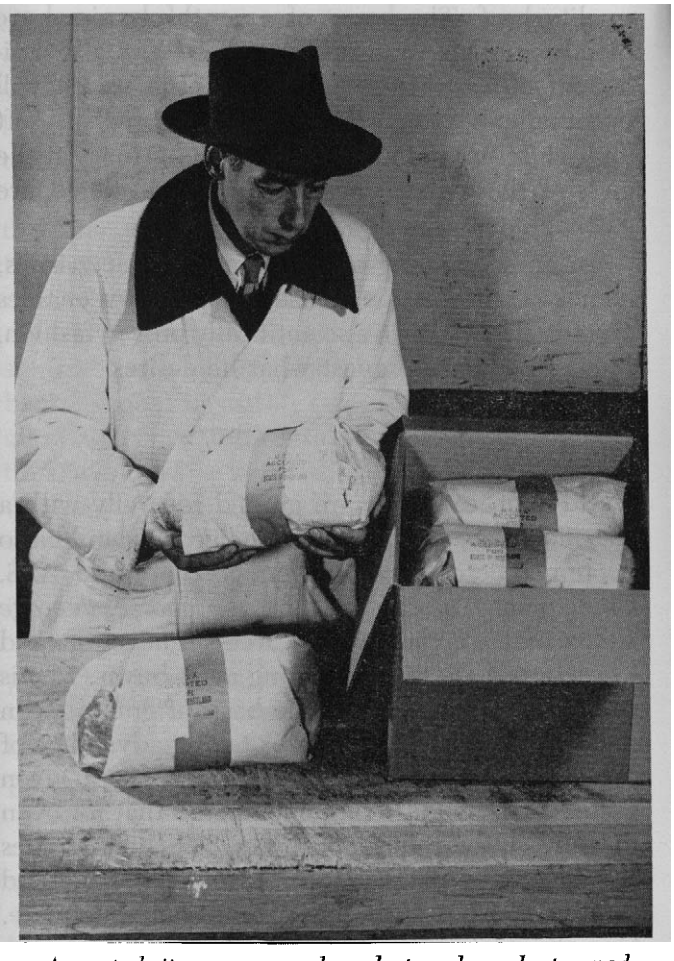
Conformation refers to the shape, contour, or the outline of the carcass or wholesale cut. It refers to its meatiness, the proportion of meat to bone, the muscling, and so forth.

Finish is synonymous with *fatness.* Included in this term is not only the amount of fat, but its distribution. It also includes marbling, the interspersion of fat particles in the lean. In terms of eating desirability, the greater the amount of finish the better a cut will "eat." There is a very high correlation between finish or fatness and eating desirability. It should be remembered that from the purchasing standpoint, a point of diminishing returns may be reached with respect to the fatness of a carcass or wholesale cut. At the same time, one should keep in mind the fact that in terms of

Illustrations courtesy of the Standardization Branch, Livestock Division, Agricultural Marketing Service, United States Department of Agriculture.



Ground beef is prepared according to specifications under the supervision of a meat grader.



Accepted items are packaged, taped, and stamped with the Acceptance Stamp.

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its mass, fat weighs considerably less than lean. In other words, given five pounds of lean and five pounds of fat, the lean will consist of a significantly smaller amount mass or area-wise.

Quality is a more nebulous term referring to the "character" of the lean, the fat, and the bone. With respect to lean, quality includes the color of lean, its texture and firmness and/or elasticity. Generally speaking, the lighter and brighter the color, the smoother or more velvety the texture, and the firmer the lean, the better. Quality of fat concerns itself with its evenness of distribution, its flakiness; it also includes marbling. Marbling makes meat juicy, tender, and flavorful.

Age of Animal

Quality of bone is the principal indication of the animal's age. The consuming public has indicated to the purveyor, through him to the packer, and eventually to the producer that he prefers meat from young animals to that derived from old animals. For instance, beef from animals ranging in age from one to three years provides the highest quality beef. The bones of a youthful animal are bloody, porous, and moist. There are also evidences of cartilage, a form of tissue which will eventually become solid bone, but which is soft and white in youth. The so-called "buttons" at the ends of the chine bones in beef, for instance, are cartilaginous.

An understanding of these three characteristics; namely conformation, finish, and quality enables one to select meat in a scientifically proven fashion, thus providing the guest what he desires.

Variation Within Grades

Although carcasses are graded federally with a specific name, such as "U.S. Choice," it should also be remembered that in practice the grade "U.S. Choice" may be divided into *top choice, average choice* and *low choice*. The carcass is never marked as such, but the discriminating meat buyer, who is completely familiar with the basis of grading, can make this differentiation, thus taking advantage of carcasses and cuts from the top end of a given grade. It should also be remembered that for oven roasting and broiling purposes, the high grades should be used; for pot roasting, stewing and grinding purposes, the lower grades are adequate. One should buy meat of a grade suitable for the purpose for which it is to be used.

Brand Names

The various packers have established a series of brand names, specific for their respective products, which they apply to the meats they sell. These brand names have often been compared to the Federal grades. Although the criteria on which the federal and packer grading systems are based are somewhat comparable, the actual grade designations are not identical. The federal grades are more specific and are, therefore, usually more reliable.

Acceptance Service

Shortly after World War II, primarily at the request of the purchasing agents of steamship companies, the U.S. Department of Agriculture set up its Acceptance Service. Since that time, this service has been used by a number of large scale purchasers of meat. The hotel and restaurant industry did not take advantage of the opportunities offered until relatively recently. The American Hotel Association as well as the National Restaurant Association have been consulting with the Standardization Division of the Agricultural Marketing Service, U.S. Department of Agriculture, Washington, D.C., on the possibilities of using this service more widely in the hotel and restaurant industries.

Basically the Acceptance Service consists of first writing detailed specifications for each meat item used, including packaging, shipping, receipt, and preparation for cooking, on a cooperative basis between the purchaser and the Standardization Division representatives. Very exacting specifications are thus developed which are submitted for quotations to the various purveyors under consideration. Once price quotations are received, the selection of the purveyor is made on the basis of the price he quotes, thus enabling the selection of the purveyor giving the lowest quotation. Since the specifications are so rigid, there is no room for any alteration of the specific item.

The Federal graders then supervise the selection of the meat and its specific processing (trimming, and so forth), its packaging, and subsequent shipment. The stamp indicating its acceptance is placed on the merchandise itself and/or on the container in which it is packed. It is thus certified that the products the purveyor proposes to furnish comply with the specifications established. The charge for this "supervised expert purchasing"

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plan is an hourly fee of $6.00 for the services of the grader. This places in the hands of the Federal graders the task of selecting and accepting meat for the hotel, restaurant, and club.

Specifications

It is essential that detailed specifications be prepared for all of the meat items received by the hotel or restaurant. This is the only way in which a uniform product can be expected at all times. It takes the guesswork out of meat purchasing and establishes a firm base for securing bids and for insuring a product that meets the standards and requirements of the purchaser.

In writing specifications, one should first indicate the specific name of the meat item. A detailed description should then be given particularly listing weight range, any measurements that are necessary to further define the cut, its Federal or United States government grade (the area within the grade: *e.g. top, average,* or *low;* although this is not listed on the grade itself, it can be ascertained by the purchaser), the degree of trim, and the proportion of lean to fat in certain instances.

Examples of Meat Specification

Ground beef, a product used by all hotels and restaurants, might have a sample set of specifications reading as follows:

> It shall be composed of not less than 50 per cent fresh boneless beef from square-cut chuck and not more than 50 per cent fresh boneless skeletal beef, excluding meat from heads, gullets, tongues, and heart. It shall contain no organs, glands, or added fat. Meat shall be free of serous membranes, major tendons, cartilage, discoloration, and bloody ends or sections. It shall have no foreign odor, deterioration, or other damage and contain no extenders, coloring agents, preservatives, or added water. The boneless meat prior to grinding shall be composed of not less than 15 per cent, nor more than 20 per cent, trimmable fat. The meat shall be ground twice: first through a plate with holes ¾ to 1¼ inches in diameter and then through a plate having 3/16-inch holes. The grinding shall be without any abnormal heating or mashing. Without further mixing, the meat shall be packaged in a moisture-resistant wrapping or container to which the meat will not readily adhere. Packages may weigh from 10 to 20 lbs. *(Taken from a USDA Acceptance Service example.)*
>
> The grade of meat should also be indicated.

Well-trimmed, oven-prepared ribs, another meat item used by practically all hotels and restaurants, might have specifications reading as follows:

> Top Choice grade 7-rib cut, to measure on the flank or tail, no more than 1½ inches from the meat of the main muscle (eye) on the loin end and no more than 4½ inches from the inside of the chine bone on the chuck end. It must be cut straight between these two points. The bones must be porous, with buttons on the ends of the ribs, and clean white fat. The chine bone must be removed squarely to where the meat splits. The ribs must weigh not less than 23 lbs. and not more than 27½ lbs.

Receiving and Storing

Upon arrival, all meat and meat products must be thoroughly checked to determine whether or not they meet with the specifications established by the hotel or restaurant operator. If the USDA Acceptance Service is used, then the seal of the acceptance on the meat or on the package will suffice for grade designation. Otherwise, the receiving room clerk should be qualified to establish whether or not the meat is "in order." Weights must be taken and checked with the invoices on all items. The condition of the meat – for instance, in the case of fresh meat, its level of *freshness* – should be ascertained; its *sanitary* aspects should be noted; and if everything is in order, it is ready to be accepted.

Once accepted, it becomes the responsibility of the operator to keep the meat in excellent condition until it is served to the guest. This includes correct *storage, processing,* and *preparation.*

Cuts of meat which are packaged in paper and stockinette, such as beef hindquarters or lamb backs, should have this covering removed so as to allow the circulation of air around the meat item, thus avoiding a moistening which will be conducive to bacteria. The temperature of the meat cooler should range from 32°F. to 36°F. Portion-ready cuts, such as steaks, should be separated in layers of kraft paper.

Meats to be frozen should be processed to the point that they are as close to the stage in which they will finally be prepared as possible before freezing. They should be properly packaged and promptly frozen.

All of the meats should be moved out of the cooler, prepared, and served, as promptly as possible. This is particularly true for pork, which is very subject to oxidative rancidity. There should be a complete turnover of the fresh meat contained in the cooler at least once a week. ●

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